

The Money Market

The quantity of money (e.g., M1) is determined by the Federal Reserve (the Fed) through its control of the reserve requirement and money creation by the banking system. The price of money is the interest rate. The interest rate is the price of money because it is what borrowers must pay to obtain money and it is also the opportunity cost of holding money rather than loaning it out.

The money market consists of the demand for money (MD) and the supply of money (MS). The Fed determines the quantity of money supplied. Since it is determined by the Fed, the money supply is independent of the interest rate, and the money supply curve is a vertical line.

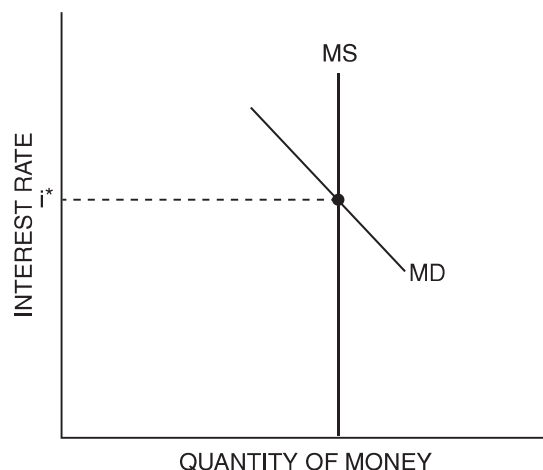
The demand for money is based on a decision by consumers to hold wealth in the form of interest-bearing assets (e.g. savings accounts) or as money (noninterest-bearing). There are three types of money demand, based on the three basic motives people have for holding money (rather than interest-bearing assets).

- Transactions demand — to make purchases of goods and services
- Precautionary demand — to serve as protection against an unexpected need
- Speculative demand — to serve as a store of wealth

The demand for money is a function of interest rates and income. The interest rate is the opportunity cost of holding money because it represents the forgone interest income that was given up in order to hold money. The demand for money has an inverse relationship with the interest rate. As the interest rate increases, the opportunity cost of holding money increases and people hold less money. As the interest rate falls, the opportunity cost of holding money falls and people hold more money. The negatively sloped demand curve for money represents the quantity of money demanded at various interest rates.



Figure 4-4.1
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1. Now suppose there is an increase in the money supply. Show the change in the money supply and the resulting change in the equilibrium interest rate on Figure 4-4.1 What happens to the quantity of money demanded when the interest rate changes? What happens to the quantity of loans as the interest rate changes? Explain.

2. Now draw a new graph of the money market, illustrating the equilibrium interest rate.



3. Suppose the demand for money increases. Show the change in money demand and the resulting interest rate on your graph. What happens to the quantity of loans as the interest rate changes? Explain.

